



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/560,114

12/09/2005

Gerhard Stenzel

2732-171

2986

6449

7590

10/20/2008

ROTHWELL, FIGG, ERNST & MANBECK, P.C.

1425 K STREET, N.W.

SUITE 800

WASHINGTON, DC 20005

EXAMINER

KOYAMA, KUMIKO C

ART UNIT

PAPER NUMBER

2887

NOTIFICATION DATE

DELIVERY MODE

10/20/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No. 10/560,114	Applicant(s) STENZEL ET AL.	
	Examiner KUMIKO C. KOYAMA	Art Unit 2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-23,25,26,28-31,33,35-40,43 and 45-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-23,25,26,28-31,33,35-40,43 and 45-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0708</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment received on July 07, 2008 has been acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 6-23, 25, 26, 28-31, 33, 35-40, 49-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US 4202491.)

Re claim 1: Suzuki discloses a machine readable authenticity mark [33-34] (see fig: 5, abstract) that is a component of a security element for securing an object of value, a component of a value document, or a component of a security paper for producing security or value documents [31] (see fig: 5, C: 1 L: 11-18 and see C: 5 L: 59-67), said authenticity mark comprising: a luminescent marking substance that emits light in the infrared spectral range (see abstract, C: 2 L: 16-20), and an absorbing marking substance that absorbs light in the infrared spectral range (see abstract, C: 2 L: 16-20) wherein a luminescent marking substance excitable in the infrared spectral range and emits in the absorption range of the infrared absorbing marking substance (see abstract, C: 2 L: 16-20, C: 6 L: 10-23.)

Art Unit: 2887

Re claim 4: Suzuki discloses an infrared absorbing mark that is colorless (see abstract, C: 2 L: 16-20, C: 6 L: 10-23 it is inherent that the infrared material is colorless since it is outside the visible spectrum.)

Re claim 6: Suzuki discloses an infrared absorbing material that has no significant absorption at 800 nm (see C: 2 L: 29-34.)

Re claim 7 and 8: Suzuki discloses an infrared absorbing mark containing a doped metal oxide in particle form with a particle size smaller than 50 μm (see C: 3 L: 5-15, C: 4 L: 7-34, C: 6 L: 50-55.)

Re claim 9: Suzuki discloses a luminescent mark doped with a rare earth metal (see C: 3 L: 5-15, C: 4, L: 7-34.)

Re claims 10, 12-14: Suzuki discloses a luminescent mark and infrared absorbing mark incorporated into the value document separate from each other (see fig: 5, abstract.)

Re claim 11: Suzuki discloses a luminescent mark and infrared absorbing mark incorporated into the value document as a mixture (see fig: 5, abstract, C: 6 L: 30-67, and C: 8 L: 23-50.)

Re claims 15-21: Suzuki discloses infrared absorbing mark represents information that is encrypted; a luminescent mark that and infrared absorbing mark overlap; value document with printed layer completely covers infrared, and luminescent mark; a printed layer which is opaque in the visible range; printed layer is opaque in the emission range of the luminescent mark; printed layer is applied by an intaglio printing technique (see fig: 5, abstract, C: 1, C: 5, C: 6 L: 50-67, C: 7 L: 1-25, C: 8 L: 24-31 it is standard in the credit card industry to encrypt customer data for security of the customer. Furthermore, it is standard to have opaque credit cards in the

Art Unit: 2887

visible range. It is inherent that the printed layer must be opaque at the emission range of the luminescent mark in order that the data is read.)

Re claims 22 and 23: Suzuki discloses an authenticity mark formed over a large area, the luminescent mark which is incorporated in the authenticity mark of the value document covers 30% (see fig: 5, C: 8 L: 24-31 the luminescent mark functions as an authenticity mark.)

Re claims 25-26: Suzuki discloses a security element for securing a value document with an authenticity mark (see fig: 5, abstract, C: 8 L: 12-21 the fluorescent, and luminescent materials function as security elements); security element is disposed detachably on a carrier layer (see fig: 5 as illustrated the security elements are incorporated into the value document as layers, therefore the layers could be stripped, and so it is detachable); security element is a label (see fig: 5, C: 8 L: 24-31.)

Re claims 28 and 33: Suzuki discloses a machine readable authenticity mark [33-34] (see fig: 5, abstract) that is a component of a security element for securing an object of value, a component of a value document, or a component of a security paper for producing security or value documents [31] (see fig: 5, C: 1 L: 11-18 and see C: 5 L: 59-67), said authenticity mark comprising: a luminescent marking substance that emits light in the infrared spectral range (see abstract, C: 2 L: 16-20), and an absorbing marking substance that absorbs light in the infrared spectral range (see abstract, C: 2 L: 16-20) wherein a luminescent marking substance excitable in the infrared spectral range and emits in the absorption range of the infrared absorbing marking substance (see abstract, C: 2 L: 16-20, C: 6 L: 10-23.) Suzuki discloses a method for checking authenticity of a value document, characterized by the steps: irradiating the machine-readable authenticity mark with infrared radiation from the excitation/absorption range of the luminescent

Art Unit: 2887

marking substance, determining the emission/absorption of the authenticity mark at a wavelength from the emission range, and evaluating the authenticity of the value document, security element or security paper on the basis of the determined emission/absorption (see fig: 1, 4a-d, C: 5, C: 6 L: 10-27); absorption of the authenticity mark is determined via a measurement of the remitted infrared radiation (see C: 6 L: 10-27.)

Re claims 29-31, 35: Suzuki discloses determination of the emission is carried out in spatially resolved fashion (see fig: 1); authenticity mark is determined on two opposite sides of the value document, security paper (see C: 1, C: 5); authenticity evaluation is carried out on the basis of a comparison of the emission (see fig: 1, C: 6 L: 10-27, C: 8 L: 24-50.)

Re claims 36-40: Suzuki discloses a machine readable authenticity mark [33-34] (see fig: 5, abstract) that is a component of a security element for securing an object of value, a component of a value document, or a component of a security paper for producing security or value documents [31] (see fig: 5, C: 1 L: 11-18 and see C: 5 L: 59-67), said authenticity mark comprising: a luminescent marking substance that emits light in the infrared spectral range (see abstract, C: 2 L: 16-20), and an absorbing marking substance that absorbs light in the infrared spectral range (see abstract, C: 2 L: 16-20) wherein a luminescent marking substance excitable in the infrared spectral range and emits in the absorption range of the infrared absorbing marking substance (see abstract, C: 2 L: 16-20, C: 6 L: 10-23.) Suzuki discloses a method characterized by the absorption of the authenticity mark determined at a wavelength from the visible spectral range for authenticity testing (see C: 5 L: 1-9); irradiation is carried out with a light-emitting diode (see C: 2 L: 50-55); infrared absorbing mark represents information, read by determining its emission and used for authenticity testing (see C: 1 L: 5-10, C: 6 L: 10-27); information

Art Unit: 2887

comprises special features of the value document, security paper, whereby information is read and processed further in authenticity testing (see C: 6 L: 10-27, C: 7 L: 25-67); an apparatus for having means for irradiating the machine-readable authenticity mark with infrared radiation from the excitation range of the luminescent marking substance, means for determining the emission of the authenticity mark at a wavelength from the emission range, and means for evaluating the authenticity of the value document, security element or security paper on the basis of the determined emission (see fig: 1, C: 6 L: 10-27, C: 7 L: 25-67.)

Re claims 49, 50: Suzuki discloses a paper (see fig: 5, C: 5 L: 59-67.)

Re claim 51: Suzuki discloses information comprising code (see C: 1, C: 5 L: 35-58.)

Re claims 52 and 57: Suzuki discloses information comprising barcode (see C: 7 L: 14-18.)

Re claims 53-55: Suzuki discloses a surface area of 100mm^2 , 400mm^2 , and coverage of 50% (see C: 6 L: 35-37, C: 8 L: 25-31.)

Re claim 56: Suzuki discloses an identity card (see C: 1 L: 10-16.)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

Art Unit: 2887

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 5, 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 4202491) in view of Dolash et al. (US 4983817.) The teachings of Suzuki are discussed above.

Re claims 5, and 45-48: Suzuki teaches an infrared absorbing material (see abstract.)

Suzuki fails to teach absorbing in the spectral range between 1200 to 2500 nm.

Dolash et al. teaches infrared absorbing material in the range of far red to NIR (see C: 10 L: 25-44 far red to NIR covers the ranges of .7 to 2 micrometers.)

It would have been obvious, at the time the invention was made, to have combined Suzuki's data card, with Dolash et al. bar code reader since it would provide for a more robust system with a greater spectral range to choose from allowing for greater security. Furthermore, the manufacture of fraudulent cards can be reduced.

6. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 4202491) in view of Henley et al. (GB 2273353.)

Re claim 43: Suzuki fails to teach a money processing machine for dealings in bank note testing device.

Hanley et al. teaches a money processing machine for dealings in bank note testing device (see abstract.)

Art Unit: 2887

It would have been obvious, at the time the invention was made, to have combined Suzuki's data card, with Henley et al. security device since it would provide for greater security of bank notes. Furthermore, the manufacture of fraudulent bank notes can be reduced.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 4-23, 25, 26, 28-31, 33, 35-40, 43 and 45-57 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant amended the claims with new limitation, and such new limitation necessitated new search and consideration. Although no newly found prior art was cited, new grounds of rejection have been provided. Accordingly, this action is Final.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2887

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUMIKO C. KOYAMA whose telephone number is (571)272-2394. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kumiko C. Koyama/
Primary Examiner, Art Unit 2887
October 12, 2008